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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/300,139	04/27/1999	GARY S. GREENBAUM	REALNET.009A	4138

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EXAMINER

SENF, BEHROOZ M

ART UNIT	PAPER NUMBER
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2613

DATE MAILED: 11/19/2003

17

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/300,139

Applicant(s)

GREENBAUM ET AL.

Examiner

Behrooz Senfi

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-54 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

1. Applicant's arguments and remarks (Paper No. 16, dated 8/8/2003) have been fully considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 – 20, 22, 24 – 32, 34 – 42 and 44 - 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hazra (US 6,510,553) in view of Boon (US ,466,697).

Regarding claims 1, 10 and 24, Hazra '553 discloses the claim limitation "Producing a plurality of encoded representations of an input media signal, and providing the input media signal, encoding the input media signal to generate the plurality of encoded representations, wherein at least a portion of the media signal is encoded in a first encoded representation of the plurality of encoded representations and the same portion is also included in a second encoded representation of the plurality of encoded representations, and first encoded representation is encoded according to a different set of encoding parameters than the second encoded representation, and switching between a decoding of one of the encoded

representations and another of the encoded representations can be performed" (i.e. cols. 8 – 9, lines 55 – 17). Hazra '553 fails to explicitly teach synchronization for switching between decoding of the encoded representations can be performed without any substantial discontinuity. However, such features are well known and used as evidenced by Boon '697 (fig. 5, analyzer 160, col. 26, lines 47+ and col. 31, lines 23+). Therefore, taking the combined teaching of Hazra '553 and Boon '697 as a whole, it would have been obvious to one having ordinary skill in the art to recognize the advantage of using analyzer (160) for control the switching as taught by Boon '697 to display images without discontinuity and smoothly.

Regarding claim 2, the limitation as claimed "each encoded representations can be decoded independently of any other encoded representation" reads on (col. 8 – 9, lines 67 – 2 of Hazra).

Regarding claims 3 - 5, 11, 14, 19 – 20, combination of Hazra '553 and Boon '697 teaches "encoded representations can be decoded starting at the synchronization points" (figs. 1a, 501, and 22 b-c of Boon) and synchronization header at the start of each word which have substantially the same time locations for each parameter (shape, texture, DCT, etc.) and the maximum time of 10 second will never be exceeded.

Regarding claims 6, 28, combination of Hazra '553 and Boon '697 teaches "video input sequence, and frame of digital video ....." (i.e. col. 1, lines 5 – 10, 15 – 16 of Hazra and fig. 3, 110, col. 1, lines 10 – 12 of Boon).

Regarding claims 7, 25 – 27, combination of Hazra '553 and Boon '697 teaches, "identifying a frame in the input sequence and encoding the identified frame ....."

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wherein a decoding of the encoded frame of the first encoded representation does not require a decoded version of another frame" reads on detecting intra frames (frames which do not require any other version of another frame), that are synched each frame (col. 34, lines 10 – 18, of Boon '697), In other words each frame in Boon '697 is synched with the header and therefore any two I frames will be synch points. Note, motion data is considered intermediate data.

Regarding claims 8, 40 and 41, combination of Hazra '553 and Boon '697 teaches "portion of each of the encoded representations is generated before any encoded representation is completely generated" (i.e. fig. 3, of Boon '697, where 120 or 130 consider as a portion of the input media).

Regarding claim 9, 12 and 34, the limitations claimed are substantially similar to claim 1, therefore the ground for rejecting claim 1 also apply here.

Furthermore regarding the additional limitation "computer readable medium" see (col. 9, lines 64+ of Hazra '553).

Regarding claims 13 and 18, the limitations claimed "server communication over network ....." reads on (fig. 2, col. 1, lines 14+ of Hazra).

Regarding claim 15, the limitations claimed are substantially similar to claims 1 and 9, therefore the grounds for rejecting claims 1 and 9 also apply here.

Regarding claim 16, "generating a set of data from digital video input sequence and video encoding application using set of data to generate plurality of encoded representations" are substantially the same as encoding parameters, therefore the ground for rejection claims 1 and 6 also apply here.

Regarding claim 17, the limitations claimed "storage device for storing data" reads on (col. 10, lines 1 – 3 of Hazra).

Regarding claim 22, MPEG protocol inherently encode contiguously.

Regarding claims 29, 30, combination of Hazra '553 and Boon '697 teaches DCT (fig. 3, 134 of Boon).

Regarding claims 31 - 32, combination of Hazra '553 and Boon '697 teaches the claimed ME (fig. 3, unit 121 of Boon) and MC (fig. 3, unit 123 of Boon) and color converted (col. 2, lines 3+ of Boon).

Regarding claim 35, the limitations claimed are substantially similar to claims 10 and 27 therefore the ground for rejecting claims 10 and 27 also apply here.

Regarding claims 36 - 39, combination of Hazra '553 and Boon '697 teaches the "encoded representations are interleaved in an output file or output stream" (i.e. fig. 3, multiplexer/interleave 150 of Boon), and "input media signal comprises a plurality of different media sources, MPEG coding environment is capable of having different media sources i.e. audio, video, texture and media source consist of video frame" (i.e. fig. 3, 110 of Boon).

Regarding claim 42, combination of Hazra '553 and Boon '697 teaches the VTR, for recording and reproduction of the media (i.e. col. 22, lines 18+ of Boon) thus reads on limitations as claimed.

Regarding claims 44 - 45, limitations claimed are substantially similar to claim 2, therefore the grounds for rejecting claim 2 also apply here.

Regarding claim 46, the limitations claimed are substantially similar to claim 1, therefore the grounds for rejecting claim 1, also apply here. Furthermore, for the limitations *"color data, motion vector data and/or discrete cosine coefficients"*, please see (col. 2, lines 3+ and fig. 3, units ME and MC for motion vector and unit 134 DCT, for discrete cosine coefficients of Boon).

Regarding claims 47, 51, and 52, combination of Hazra '553 and Boon '697 teaches the claimed *"plurality of encoded representations are interleaved in an output file"* (i.e. fig. 3, multiplexer 150 of Boon), that serves for interleaving purpose, and as for the claimed *"each of the encoded representations is a representation of a portion of the input"* and also *"each of the encoded representations is a representation of the entire input media"* would have been obvious, the portion of the input will be selectively encoded and the encoded portion/representation will/must include a portion of the input media data, and ultimately the output of the signal/media will cover the entire input signal.

Regarding claims 48 – 50, combination of Hazra '553 and Boon '697 teaches the claimed *"input media signal comprises a plurality of different media source, video and audio"* (fig. 1, col. 1, lines 6 – 10 of Hazra).

Regarding claims 53 and 54, the claimed limitation *"storing encode representations in a memory consisting of at least one of the media server, download server, hard disk drive, ....."* reads on (col. 10, lines 1+ of Hazra, and col. 11, lines 1 – 3 recording medium of Boon).

4. Claims 21, 23, 33 and 43 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Hazra '553 and Boon '697 as applied to claims 1 – 20, 22, 24 – 32, 34 – 42 and 44 – 54 above, further in view of Trans (US 2001/0038674).

Regarding claim 21, Combination of Hazra '553 and Boon '697 teaches "Producing a plurality of encoded representations of an input media signal, and providing the input media signal, encoding the input media signal to generate the plurality of encoded representations, wherein at least a portion of the media signal is encoded in a first encoded representation of the plurality of encoded representations and the same portion is also included in a second encoded representation of the plurality of encoded representations, and first encoded representation is encoded according to a different set of encoding parameters than the second encoded representation, and switching between a decoding of one of the encoded representations and another of the encoded representations can be performed" (i.e. cols. 8 – 9, lines 55 – 17 of Hazra). But fails to teach the claimed "interleaved data .....". However such feature are well known and used as evidenced by Trans '674 (figs. 11a and 20). Therefore, taking the combined teaching of Hazra '553 and Boon '697 and Trans '674 as a whole, it would have been obvious to one having ordinary skill in the art to modify the combination system of Hazra '553 and Boon '697 as taught by Trans '674, for the purpose of recovering the interleaved data.

Regarding claim 23, trans '674 teaches specific data location encode and the synchronous response (i.e. pages 17 and 18, section 0267).

Regarding claim 33, Boon '697 teaches MPEG, and MPEG process does includes sub-sampling process.



Regarding claim 43, combination of Hazra '553 and Boon '697 and Trans '674 teaches the claimed "plurality of encoded representations of input media and transmitting to a decoder and streaming over network) reads on (fig. 1, col. 8 – 9, lines 65 – 17 of Hazra).

### ***Conclusion***

5 Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Behrooz Senfi** whose telephone number is **(703)305-0132**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Chris Kelley** can be reached on **(703)305-4856**.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**Or faxed to:**

**(703) 872-9314**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relative to the status of the application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

B. S. B. S.

11/15/2003



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